



Via Express Mail

# EL7222370P202

Box Non-Fee Amendment Commissioner for Patents Washington, DC 20231

## PRELIMINARY AMENDMENT UNDER 37 C.F.R. § 1.115

In response to the *Notice of Omitted Item(s) in a Nonprovisional Application* of August 6, 2001, Applicant amends the above-identified U.S. patent application as follows.

### In the Specification:

Please replace the current specification with the substitute specification enclosed. A marked-up copy of the original specification showing the changes made in the substitute specification also is enclosed.

#### In the Claims:

Please cancel claims 9, 19, and 35 and amend claims 10-16, 20, 21, 36, and 37 to depend from claim 1.

Also please substitute the following claim 1 for claim 1 as originally filed. A marked-up version of the claims showing the changes is enclosed together with a clean version of all claims.

- 1. (Amended) A method of providing network access across a shared communications medium between at least four competing users, with at least a first pair of users being grouped within a first class and at least a second pair of different users being grouped within a second class, comprising the steps of:
  - (a) determining class and user allowances of network access for a first time interval by allocating network access to each user class for a first future time interval and, for each user class, allocating network access to each user within the class for the first time interval,
  - (b) providing network access to each user during the first time interval such that no user receives more network access than that user's allowance and no class receives more collective network access than that class' network allowance;
  - (c) determining class and user allowances of network access for a second time interval by allocating network access to each user class for a second future time interval succeeding the first time interval and, for each user class, allocating network access to each user for the second time interval, the allocated network access for the second time interval for at least one user differing from that user's allocated network access for the first time interval; and
  - (d) providing network access to each user during the second time interval such that no user receives more network access than that user's allowance and no class receives more collective network access than that class' allowance;
  - (e) wherein said step of determining class and user allowances of network access for a first time interval by allocating network access includes,
    - (i) monitoring network access usage by each user,
    - (ii) forecasting collective network access usage by each user class during a future time interval based on said step of monitoring network access usage by each user, and
    - (iii) prioritizing the user classes for the allocating of the network access.

#### REMARKS

In response to the *Notice of Omitted Item*(s) in a *Nonprovisional Application*, Applicant herein submits a substitute specification including all pages 1-45.

In the substitute specification, Applicant amends the first section entitled "Cross-Reference to Related Application" to supply the missing serial numbers and the titles of the corresponding seven U.S. patent applications incorporated by reference into the present application. It is noted that all seven incorporated patent applications were filed concurrently with the present application, are to McKinnon et al., and all relate to allocating access across a shared communications medium. Applicant submits that no new matter is added by filling in the identifying information regarding the incorporated U.S. patent applications.

In the substitute specification, Applicant also expressly incorporates a portion of the specification of incorporated U.S. patent application serial no. 09/800,861 in order to compensate for the missing pages noted in the *Notice of Omitted Item(s)* in a *Nonprovisional Application*. The portion now expressly recited (and previously incorporated by reference) into the present application is found on page 30, line 22 through page 37, line 25 of this incorporated application. Of course, reference numbers and figure numbers have been changed to conform to the figures of the present application; however, the subject matter now added is the same as that which was originally incorporated by reference.

As Applicant has amended to the specification of the present application to incorporate expressly that which was incorporated by reference when the present application was filed, Applicant submits that no new matter is added by the substitute specification and that the present application, including the substitute specification, enjoys the benefit of the original filing date of the present application.

Applicant also amends the claims by reciting the features of claim 9, 19, and 35 in amended claim 1; canceling claims 9, 19, and 35; and amending claims 10-16, 20, 21, 36, and 37 to depend from to claim 1.

In view of the foregoing, Applicant submits that the present application stands in condition for examination and respectfully requests such examination.

Respectfully submitted,

(had D. Tillman

Chad D. Tillman U.S. Reg. No. 38,634 MORRIS MANNING & MARTIN, L.L.P. Suite 1125 6000 Fairview Rd. Charlotte, NC 28210 (704) 554-5032